

Real Number Relationships

Catholic Identity Standards (Ways to Grow)		Notes	Cheo	ck Up	
Living our Faith	□ I can connect what I learn to my faith.*				
	□ I can apply what I learn in my daily life.*				

Learning Process Standards (Tools to Know)		Notes	Che	eck l	Jp
Applying Math in Everyday Situations	□ I can determine what math I need to use to solve a problem. 8.2A				
Using Problem- Solving Models	□ I can use a problem-solving model to solve a problem. 8.2B				
	□ I like when I can solve difficult problems.* 8.20				

Content		Notes	Chec	(Up
Representing Real Numbers	I can explain the difference between whole numbers, integers, rational numbers, irrational numbers, and real numbers using a graphic organizer. 8.3A			
	□ I can write a number in scientific notation. 8.3A.1			
Magnitude of Real Numbers	I can order a set of real number from least to greatest or greatest to least. 8.3B			
	\square I can approximate values for numbers such as π and $\sqrt{50}$ and place them on a number line. 8.3B.1			

Learning Process Standards (Ways to Show)		Notes	Che	eck l	Jp
Creating/Using Representations	□ I can create a representation of my math solution and explain it to another person. 8.2D				
Analyzing Information	□ I can describe and connect math ideas. 8.2E				
	□ I can ask questions to figure out if something is true or false.* 8.2F				



Proportional and Non-Proportional Reasoning

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Learning Process Sta	ndards (Tools to Know)	Notes	Check Up
Applying Math in Everyday Situations	□ I can determine what math I need to use to solve a problem. 8.2A		
Using Problem- Solving Models	□ I can use a problem-solving model to solve a problem. 8.2B		
	□ I like when I can solve difficult problems.* 8.2C		

Content		Notes	Check Up
Functions	□ I can identify a function when given ordered pairs, mappings or graphs. 8.5A		
	\Box I can find x and y values in problems about direct variation. 8.5B		
Proportional	□ I can represent proportional situations using a table. 8.5B.1		
Reasoning	□ I can represent proportional situations using a graph. 8.5B.1		
	□ I can represent proportional situations using an equation. 8.5B.1		
	I can write an equation from a table of data. 8.5C		
	□ I can write an equation from a verbal description. 8.5C		
	□ I can write an equation from a graph. 8.5C		
	□ I can represent non-proportional situations using a table. 8.5C.1		
	□ I can represent non-proportional situations using a graph. 8.5C.1		
Non-Proportional	I can represent non-proportional situations using an equation. 8.5C.1		
Keasoning	□ I can explain the differences between proportional and non- proportional relationships when given a table. 8.5C.2		
	□ I can explain the differences between proportional and non- proportional relationships when given a graph. 8.5C.2		
	□ I can explain the differences between proportional and non- proportional relationships when given an equation. 8.5C.2		
	I can identify proportional and non-proportional functions when given a real-world problem. 8.5C.3		
	□ I can find the slope and y-intercept from a table. 8.5D		
	□ I can find the slope and y-intercept from a graph. 8.5D		
Slope	I can explain how two points on the same line have the same slope. 8.5D.1		
	□ I can graph proportions and explain how the unit rate is the same as the slope of the line. 8.5.2		

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Transformational Geometry

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Applying Math in Everyday Situations	□ I can determine what math I need to use to solve a problem. 8.2A				
Using Problem- Solving Models	□ I can use a problem-solving model to solve a problem. 8.2B				
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Content		Notes	Check	Up
	□ I can use an algebraic rule to represent the translation of a figure on a coordinate plane. 8.6A			
	I can use an algebraic rule to represent the reflection of a figure on a coordinate plane. 8.6A			
Industormations	I can use an algebraic rule to represent a rotation of a figure on a coordinate plane. 8.6A			
	□ I can explain that rotations, reflections, and translations generate congruent figures; but dilations do not. 8.6A.1, 8.6A.2			
Dilations	I can use an algebraic rule to dilate a figure on the coordinate plane. 8.6B			
	I can compare the side lengths and angles of a shape and its dilation. 8.6B.1			
	□ I can explain how the scale factor can affect the dimensions and the area of a dilated figure. 8.6B.2			

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Triangles

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Learning Process Standards (Tools to Know)		Notes	Check Up		Jp
Applying Math in Everyday Situations	□ I can determine what math I need to use to solve a problem. 8.2A				
Using Problem- Solving Models	□ I can use a problem-solving model to solve a problem. 8.2B				
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Content		Notes	Check	Up
Pythagorean Theorem	□ I can use $a^2 + b^2 = c^2$ to find missing side lengths of a right triangle. 8.6C			
	□ I can use $a^2 + b^2 = c^2$ to tell whether a triangle is a right triangle. 8.6C			
	□ I can explain how the Pythagorean theorem $(a^2 + b^2 = c^2)$ works using models or pictures. 8.6C.1			
	□ I can use $a^2 + b^2 = c^2$ to find distances between points on a coordinate plane. 8.6C.2			
Transversals	I can find angle measures related to triangles and their exterior angles. 8.6D			
	I can find the measures of angles formed when a line crosses two parallel lines. 8.6D			
	I can tell if two triangles are similar just by looking at their angle measures. 8.6D			

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Surface Area and Volume

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Content		Notes	Check Up	
Surface Area	I can use the formulas for surface area of prisms and cylinders to solve problems. 8.6E			
Volume	I can use the formulas for volume of cylinders, cones, and spheres to solve problems. 8.6F			
	□ I can explain that the volume of a cylinder is found by multiplying the area of its circular base ($B = \pi r^2$) by its height (h). 8.6F.1			
	I know that a cylinder has 3 times the volume of a cone with the same base and height. 8.6F.2			

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Data Analysis

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Content		Notes	Check Up	
Interpreting Data	□ I can use a trend line on a scatterplot to make predictions. 8.7A			
	I can describe whether there is a linear, non- linear, or no association between the data represented on a scatterplot. 8.7A.1, 8.7A.2			
	□ I can represent data on a scatterplot. 8.7A.2			
	I can find the mean of a set of numbers, then use it to find the mean absolute deviation. 8.7A.3			
	□ I can think of ways to pick random samples from a larger group of data. 8.7A.4			

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Equations and Inequalities

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Applying Math in Everyday Situations	□ I can determine what math I need to use to solve a problem. 8.2A				
Using Problem- Solving Models	I can use a problem-solving model to solve a problem. 8.2B				
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Content		Notes	Check Up	þ
Solving Problems with Equations/ Inequalities	I can solve equations with variables on both sides of the equal sign. 8.8A			
	I can write an equation to represent a word problem. 8.8A.1			
	I can write an inequality to represent a word problem. 8.8A.1			
	I can write a word problem when given an equation. 8.8A.2			
	I can write a word problem when given an inequality. 8.8A.2			
	□ I can identify the point where two lines intersect and can check that the <i>x</i> - and <i>y</i> -values in the ordered pair make both linear equations true. 8.8A.3			

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